



Dr. Rebecca T. Barber is Associate Vice President for Financial Planning, Budget, and Analysis at the University of Nevada, Las Vegas, where she works with all aspects of university data for strategic and financial planning, predictive modeling, and econometric analysis. She is responsible for the design and development of a long-term forecasting model to be used in university decision-making and the university-wide budget process. Previously she worked in the budget office at Arizona State University, where she collaborated across the campus on long-range planning, sustainable funding models, financial analysis of new proposals, and a radical revision of the university tuition model. She is also an Assistant Clinical Professor in ASU's Teachers College, where she created a unique online graduate certificate in Advanced Analytics in Higher Education, encompassing data science, data mining, and data visualization. She holds a Ph.D. in Education Leadership and Policy Analysis from ASU and an MBA from the W.P. Carey School of Business at ASU.

PROFESSIONAL EXPERIENCE

University of Nevada, Las Vegas

2019 – Present

Associate Vice President of Financial Planning, Budget, and Analysis & Chief Budget Officer

- Led resource planning and allocation for the university, working with the Provost and CFO to align spending with the institution's strategic goals, Presidential and Board priorities.
- Managed state budget cuts due to COVID-19 (FY20-FY23) of 4%, 20%, 12%, and 12% per year, including identifying ways to close budget gaps or shift expenses, across 7 separate state appropriations.
- Managed \$81M in HEERF Institutional and Minority-Serving Institution funds, including approving all expenditures, ensuring audit documentation was complete, and completing all federal reports.
- Drove the procurement and implementation of a new budget system (Anaplan) across all institutions within the Nevada System of Higher Education, ending the use of excel spreadsheets for budget development and substantially improving accuracy while reducing the time spent by both campus users and the central budget office. Defined reports within Anaplan that gave campus users visibility into data they had previously been unable to access through the ERP (Workday) included trended financial data and tied individual position-level budgets to their source accounts and cost centers.
- Developed a long-range planning model in Anaplan to facilitate capital planning and long-term debt capacity utilization and support UNLV's strategic plans. Worked extensively on the sequencing of capital projects and debt issuance to maximize available resources.
- Led the process of the university joining the ABC-Insights Consortium (now HelioCampus). Rolled out the benchmarking capabilities to administrative users and senior leadership, allowing for data-informed decision-making regarding staffing levels.
- Increased transparency in the financial management of the university by frequently speaking with staff, faculty, and students about financial management in higher education, the processes and issues related to public higher education management, and the impact of the COVID-19 pandemic on both the states and the institution's financial situation. Ensured an open line of communication with Deans and VPs to make sure that plans were comprehensive and compliant with existing rules while suggesting alternative approaches that would meet the strategic goals presented.
- Coordinated board and legislative reporting, including responding to requests for the fiscal impact of a wide variety of different legislative proposals. Crafted responses that provided transparency to the legislature while truthfully representing the challenges related to proposed legislation.
- Created ad hoc financial models in support of senior leadership decision-making, including modeling potential long-term contracts, alternative financial arrangements, and what-if scenarios.
- Collaborated extensively with information technology, decision support/institutional research, and enrollment management to improve the availability and use of data across campus. Served on the Executive Data Oversight Committee as a representative of human resources and finance when considering changes to data governance and future data developments.

Arizona State University

2012 – 2019

Senior Director, Management Analysis, Office of Planning and Budget

- Designed, modeled, and led the approval process for an innovative new tuition approach. Created a complex, flexible excel model to evaluate alternatives such as different rates, rate relationships, program groupings, and special student groups. Performed sensitivity analysis to ensure equitability of the proposed changes and find an optimized solution that met both financial and political goals. Results include: simplified student bills (from 10+ lines to 3), reduced the variability of student bills from semester to semester, eliminated more than 6000 class fees, program fees, and differential tuitions, and generated an incremental \$13M in revenue.
- Created an enrollment forecasting model accurate within +/-1.5% overall for the next academic year
- Developed an Employee Retention model for university staff. Identified characteristics and behaviors indicative of an employee at risk of attrition to preemptively intervene.

- Developed and maintained an econometric model of tuition elasticity of demand for use in forecasting enrollment and revenue.
- Led the development of a comprehensive strategic financial model for 5-10 year projections.
- Led the relocation of the university Budget System to the cloud and the implementation of a major system upgrade (version 7.5 to version 10). Led the redevelopment of the university Budget System to support a new financial system, including planning for training, evaluating prototypes, and communicating the changes to users.
- Conceptualized and developed an econometric model to evaluate the impact of ASUOnline on the university as a whole, including both cost and quality measures.
- Combined student, human resources (HR), and financial data to create a clear, concise picture for university leadership of where ASU stood regarding performance goals.
- Benchmarked ASU against peer and similar institutions on various topics, including tuition, fees, fiscal efficiency, and staffing. Implemented ABC-Insights Benchmarking platform.
- Assisted campus police with the creation of a strategic plan and a staffing model that considers square footage, call volumes, and the activity types on campus.
- Responded to requests for data and analysis from NCES/IPEDS, the Arizona Legislature, and the AZ Board of Regents, as well as internal stakeholders such as the CFO, Provost, and President.
- Nominated for (by the CFO) and completed the ASU Advanced Leadership Initiative, Cohort 2, a leadership training initiative designed to develop the most promising leaders throughout the institution.

Assistant Clinical Professor, Mary Lou Fulton College of Education

Ongoing

Creator & Program Coordinator, [Advanced Analytics in Higher Education](http://links.asu.edu/AdvancedAnalytics) Graduate Certificate

- Conceived, designed, developed, and taught/taught a 15-credit online data science certificate program contextualized within Higher Education. The program is intended to enhance the ability of higher education institutions to make use of advanced research and data science techniques to support data-driven decision-making. Courses included teaching advanced Excel, SQL, RapidMiner, and Tableau. See <http://links.asu.edu/AdvancedAnalytics> for details.
- Taught HED644: Finance and Budgeting in Higher Education.

Apollo Group

2010 – 2012

Associate Director, Financial Planning and Analysis

- Developed a predictive statistical model for enrollment and revenue. Enrollment was accurate within +/- 1% four months out, while revenue was accurate within +/- 2% three months out.
- Provided data requirements for the data warehouse development team.
- Applied statistical techniques to quantify seasonal changes in enrollments.

Manager, Analytics

- Mined extensive student-level and learning management system data for insight into how to improve learning, retention, and graduation rates.
- Taught statistical and data mining techniques to other analysts to improve the overall quality of our use of data within the institution.
- Created the first university-wide predictive model of student success, including acquiring all necessary data fields, statistical analysis of the data, and final model creation for implementation into production processes. The model correctly predicts a student passing their current course 85% of the time before the course start (based on behaviors in prior courses), 90% of the time after week one, and 95% of the time by week three.
- Defined requirements and enhancement requests for dashboards and data warehouses.

SELECTED PUBLICATIONS

Gunter, L. M., Gilchrist, R. J., Blade, E. M., Reed, J. L., Isernia, L. T., Barber, R. T., Foster, A. M., Feuerbacher, E. N., & Wynne, C. D. L. (2022). [Emergency fostering of dogs from animal shelters during the COVID-19 pandemic: Shelter practices, foster caregiver engagement, and dog outcomes.](https://doi.org/10.3389/fvets.2022.862590) *Frontiers in Veterinary Science*. <https://doi.org/10.3389/fvets.2022.862590>

Gunter, L. M., Gilchrist, R. J., Blade, E. M., Barber, R. T., Feuerbacher, E. N., Platzer, J. M., & Wynne, C. D. L. (2021). [Investigating the Impact of Brief Outings on the Welfare of Dogs Living in US Shelters](https://doi.org/10.3390/ani11020548). *Animals*, 11(2), 548. <https://doi.org/10.3390/ani11020548>

Gunter, L. M., Barber, R. T., & Wynne, C. D. L. (2018). [A canine identity crisis: Genetic breed heritage testing of shelter dogs](https://doi.org/10.1371/journal.pone.0202633). *PLOS ONE*, 13(8), e0202633. <https://doi.org/10.1371/journal.pone.0202633>.

Gunter, L., Barber, R., & Wynne, C. (2016). [What's in a Name: Effect of Breed Perceptions & Labeling on Attractiveness, Adoptions & Length of Stay for Pit-Bull-Type Dogs](https://doi.org/10.1371/journal.pone.0146857). *PLOS ONE*, 11(3), e0146857. <https://doi.org/10.1371/journal.pone.0146857>

Barber, R. and Sharkey, M. (2012) [Course correction: using analytics to predict course success](#). In *Proceedings of the 2nd International Conference on Learning Analytics and Knowledge (LAK '12)*, Simon Buckingham Shum, Dragan Gasevic, and Rebecca Ferguson (Eds.). ACM, New York, NY, USA, 259-262. DOI=10.1145/2330601.2330664

SELECTED PRESENTATIONS AND TALKS

- Barber, R., Ng, W, *Anaplan Connected Planning & Budgeting, featuring UNLV, NACUBO Planning & Budgeting Forum*, Sept. 2021
- Barber, R. Association for Institutional Research 2019 Conference, May 2019, *Visualizing Survey Data in Tableau (Half-day Pre-conference Workshop)*
- Barber, R. EDUCAUSE / NACUBO / AIR Enterprise Summit: Analytics, April 2019, *Forecasting and Predictive Analytics: Combining Techniques for Better Projections*
- Barber, R. Western Assoc. of College & University Business Officers (WACUBO) Conference, May 2014, *Using Tuition Elasticity to Forecast Enrollment*
- Barber, R. Association for Institutional Research (AIR) 2014 Conference, May 29, 2014, *Withdrawals are addictive: Findings from the PAR cross-institutional database regarding the dangers of withdrawals*
- Barber, R.; Igres, L., Campus Safety, Health and Environmental Management Association, March 27 2013, *Money Matters: Developing a Sustainable Model for EH&S Funding*

EDUCATION

Doctor of Philosophy, Educational Leadership and Policy Studies, Arizona State University (ASU), Tempe AZ (2011) Coursework focused on quantitative research applied to education policy and higher education outcomes and included 21 credit hours of graduate statistics, including Multivariate and Hierarchical Linear Modeling.

Dissertation Title: Characteristics of Students Placed in College Developmental Mathematics: Using the ELS:02/06 Data to Understand and Predict Developmental Mathematics Placements

Master of Arts, Social and Philosophical Foundations of Education, ASU, Tempe AZ (2011)

Master of Business Administration, W. P. Carey School of Business, ASU, Tempe AZ (2004)

Bachelor of Science, Computer Information Systems, Excelsior College, Albany NY (2002)

CERTIFICATIONS

Project Management Institute, Project Management Professional (PMP) 2003 – 2025 Cert. # [71674](#)

SELECTED TECHNOLOGIES

Data Visualization Tools: Tableau
Statistical Tools: SPSS, Stata, R
Data Mining Tools: RapidMiner, R

Financial Planning Tools: Anaplan, Whitebirch/Synario
Database/Data Storage: Oracle, SQL Server, Teradata, PostgreSQL
Other: Microsoft Excel, Word, PowerPoint, Google Apps